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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/562,449

12/27/2005

Eiji Shiba

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FOLEY AND LARDNER LLP
SUITE 500
3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER

ZEMEL, IRINA SOPHIA

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

09/10/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/562,449	Applicant(s) SHIBA ET AL.	
	Examiner Irina S. Zemel	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/8/08; 11/30/07</u> . | 6) <input checked="" type="checkbox"/> Other: <u>IDS 12/27/05</u> . |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 02/14423 to Kuraray Co., (hereinafter “Kuraray”).

It is noted that US PGPub 2004/0092666 is a US National stage equivalent of the referenced WO Kuraray application, and the PGPub documents is used as an English translation of the referenced WO Kuraray international publication. All references are made with respect to the US PGPub document.

Kuraray discloses a foamable or foamed composition comprising a metallocene ethylene-1-butene copolymer, styrene based block copolymer (such as SEPTON's), and a blowing agent (chemical or physical), See the entire specification and specifically example 22. The density of the foamed product in the example is 0.59, which is less than claimed 0.6. The foams are crosslinked foams. Among preferred ethylene polymers, various Engage and Exact metallocene polyethylene copolymers are disclosed in the reference, which completely correspond to the claimed polyethylene copolymers in their properties. See [0045-48] and illustrative examples. The reference further expressly discloses suitability of the foamed product for shoe soles, shoe parts, etc,. The reference further expressly discloses composite materials including

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composites that are obtained via “two-color molding” with a polymer, such as polyethylene, which inherently results in a laminate.

The invention as claimed, therefore, is fully anticipated by the disclosure of the reference.

Claims 1-7 and 10-12 are U.S.C. 102(b) as being anti JP 001-26663 to Sanwa Kako KK., (hereinafter “Sanwa”)

Sanwa discloses foamable or foamed composition comprising a metallocene ethylene-1-butene copolymer [006], styrene based block copolymer [0007], and a blowing agent (chemical or physical) [008]. See the entire specification and specifically illustrative examples. The density of the foamed product in the example is less than 0.01, which is less than claimed 0.6. The foams are crosslinked foams. Among preferred ethylene polymers, Kernel metallocene polyethylene copolymers are disclosed in the reference, which completely correspond to the claimed polyethylene copolymers in their properties. See [0045-48] and illustrative examples.

Claim Rejections - 35 USC § 102/103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 9 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over either one of Kuraray or Sanwa.

The disclosure of both references is discussed above in detail. While the references expressly disclose crosslinking of the composition, and both references disclose addition of significant amounts of crosslinking agents, the references do not expressly disclose the gel fraction (directly related to the degree of crosslinking) for the resulting foams. However, since the compositions disclosed in both references are substantially identical to the claimed compositions, contain high amount of crosslinking agents (alone or in combination with crosslinking aid) and are processed at the temperatures well above the activation temperature of the disclosed crosslinking agent, it is reasonable believed that the foamed processed compositions inherently exhibit the claimed gel fraction. The burden is shifted to the applicants to provide factual evidence to the contrary.

Claim Rejections - 35 USC § 103

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuraray

Claim 10 is discussed above. In the alternative, since the Kuraray reference discloses suitability of the foamed composition for shoe soles, and also discloses adhesive attachment of the sole to the bottom of the footwear, this embodiment makes the claimed laminates at least obvious.

Claims 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanwa.

The disclosure of Kuraray, teaches shoe-parts as the preferred end product of the foamed compositions. In view of the properties expressly disclosed in the reference, i.e., excellent impact resilience, shoe soles of the disclosed footgear parts of Sanwa would have been obvious for an ordinary artisan. (makes laminates comprising such parts obvious for an ordinary artisan as the most common construction of a shoe. In turn, similarly to Kuraray, the claimed laminates would have been obvious as the most common assembly of a shoe sole and the rest of the shoe.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over either one of Kuraray or Sanwa in combination with EP 1229076 to Mitsui Chemicals, INC., (hereinafter "Mitsui").

The disclosure of both references is discussed above in detail. The references do not disclose processing the foams into a final product via secondary compression of the foams. However, the references expressly disclose suitability of the foams for making shoe parts, specifically soles. It is well known in the art that such shoe parts are prepared by the step of secondary compressing of foamed sheets, as evidenced, for example, by the disclosure of Mitsui, [077-79] and illustrative examples. The Mitsui references expressly disclose secondary compressing of foams based on crosslinked polyolefins for production of shoe soles and other shoe parts. Therefore, it would have been obvious to form the foamed compositions disclosed by either Kuraray or Sanwa

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into final products via secondary compression with reasonable expectation of success since this step is a known step in producing final products from crosslinked polyolefin based foams. In addition, the reference discloses that additional crosslinking (secondary crosslinking) may take place during the secondary compression step, even further increasing degree of crosslinking (and, thus, gel fraction), thus, it even stronger supports the examiner believe of the disclosed foams inherently meeting the claimed limitation (before or after the secondary compression step).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irina S. Zemel whose telephone number is (571)272-0577. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571)272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/ Irina S. Zemel/
Primary Examiner, Art Unit 1796

Irina S. Zemel
Primary Examiner
Art Unit 1796

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